APPENDIX B

Analysis of Operational Financial Risk of NCMC

Summary

All start-up operations face varying degrees of business risk. NCMC is no exception. The planners of NCMC acknowledged several areas of business risk in the most recent description of NCMC's Financial Plan including:

- "Changes in reimbursement policies by public payors, including Medicare and Medicaid, and/or government regulations,
- Greater than anticipated volumes and cost of uncompensated care, rendering the NCMC infeasible,
- Inability to achieve administrative efficiencies, or unforeseen changes in expenses,
- Inability to attract and retain expertise necessary to operate a two hospital system,
- Transferring of services from Howard University Hospital might cause it to become financially destabilized and result in two financially unstable hospitals during the development stage of NCMC."

Hospitals generally face a high level of financial risk. According to the American Hospital Association, in 2003 more than one-third of hospitals reported a negative operating margin.

This analysis will review the available information related to NCMC in year five of operations and other area hospitals to determine what other potential risks exist related to the current financial projections for NCMC. This analysis will cover five key areas: utilization, revenue projection drivers, payor mix, salary and wage expense, and accreditation status.

The key findings of this analysis include:

- The NCMC estimates assume an 80 percent capacity in the main hospital which is above the DC acute hospital average of 76 percent. The NCMC financial plan indicates that 80 percent capacity is needed to breakeven. If NCMC does not achieve the breakeven capacity of 80 percent, the hospital could struggle financially.

- About 7 percent of NCMC's projected revenue is from outpatient surgeries. In year five of operations, the NCMC financial plan assumes revenue from 15,000 outpatient surgeries, twice the District average.

- About 8 percent of NCMC's projected revenue is from emergency room related services. In year five of operations, NCMC anticipates emergency room visits per day that exceed all but two of the other seven area hospitals. In three cases, NCMC's emergency room visits per day exceed the comparison hospital by 30 percent or more – Georgetown (72 emergency room visits per day), Greater Southeast (107 emergency room visits per day), and Sibley (75 emergency room visits per day).

- NCMC's estimated inpatient payor mix assumes a lower percentage of public insurance (Medicare and Medicaid) and a higher percentage of private insurance than the average of DC area hospitals. If this payor mix skews more towards the DC average, then this could place downward pressure on NCMC's revenue base.

- Compared to individual hospitals, NCMC's total payor mix resembles Washington Hospital Center. After five years of operation, can NCMC achieve a payor mix similar to an established health care facility such as the Washington Hospital Center?

- By year five of the financial plan, NCMC is projected to have a salaries and wages to net revenue ratio of 40 percent. This is significantly lower than Standard and Poor's median ratio for stand-alone hospitals of 51 to 56 percent. Have these potential costs been understated?

- The Accreditation Council for Graduate Medical Education (ACGME) is the organization which evaluates and accredits medical residency programs in the United States. Since 2002, through ACGME, Howard University Hospital has voluntarily withdrawn accreditation for three medical teaching programs and lost accreditation for four, including emergency medicine. This trend places additional cost pressure on teaching hospitals because lower paid residents are no longer available to provide hospital coverage.

Utilization Analysis

There are several key underlying assumptions that influence whether NCMC will be financially viable by the fifth year of operation. The current financial estimates indicate that NCMC will have operating deficits in year one and year two and have positive operating margins in years three through five.

Percent Occupancy Comparison

Hospital	Total Acute Beds in Service	Total Percent Occupancy
NCMC Year 5	230	80%
GWU	332	63%
Georgetown	329	83%
Greater Southeast	218	61%
Howard	291	73%
Providence	273	77%
Sibley	226	72%
Wash. Hosp. Center	794	80%
Weighted Average (Excluding NCMC)	352	76%

Sources: NCMC Financial Plan, July 12, 2005; DCHA 2004 Utilization Indicators.

- About half the NCMC's revenue is from inpatient services which makes the percent of beds that are occupied a key utilization indicator.

- NCMC's estimated acute hospital occupancy in year five of 80 percent is a critical underlying assumption. According to the NCMC financial plan, "The combination of required staffing and other fixed cost result in a projected breakeven near 80 percent capacity. Consequently, the hospital is expected to struggle financially until the operations reach breakeven capacity."

- The NCMC estimates assume 80 percent occupancy in the main hospital which is above the DC acute hospital average of 76 percent. (Note: NCMC also has 20 planned correctional beds with an estimated of occupancy of 100 percent. The correctional beds are excluded from this analysis so the figures are comparable to other hospitals).

- In addition, the NCMC estimate is higher than every other DC acute care hospital except Washington Hospital Center (80 percent) and Georgetown (83 percent). The NCMC estimate is significantly higher than established teaching hospitals at GWU (63 percent) and Howard (73 percent).

Outpatient Surgeries	
Hospital	Outpatient Surgeries
NCMC Year 5	15,000
GWU	5,480
Georgetown	9,113
Greater Southeast	2,040
Howard	7,439
Providence	7,326
Sibley	9,685
Wash. Hosp. Center	10,837
Average (Excluding NCMC)	7,417
Sources: NCMC Financial Plan; "Hospital Benchmarks," ingenix 2004 using 2002, Medicare cost reports as cited by Stroudwater Associates.	

- About 7 percent of NCMC revenue is expected to come from outpatient surgeries.

- The NCMC estimates assume 15,000 outpatient surgeries in year five which is the highest among the area hospitals. This estimate is double the average of the other area hospitals and twice Howard University Hospital's 2004 outpatient surgery total.

- This estimate is 38 percent greater than the next closest hospital which is Washington Hospital Center with 10,837 outpatient surgeries in 2004.

Revenue Projection Driver Analysis

Admissions per Day Comparison			
Hospital	Admissions	Admissions Per Day	Total Beds
NCMC Year 5	13,505	37.0	250
GWU	14,772	40.5	332
Georgetown	14,319	39.2	329
Greater Southeast	7,886	21.6	218
Howard	12,584	34.5	291
Providence	13,132	36.0	273
Sibley	13,096	35.9	226
Wash. Hospt. Center	42,734	117.1	794
Average (Excluding NCMC)	16,931.9	46.4	352
Average (Excluding NCMC, Greater Southeast, WHC)	13,580.6	37.2	290
Sources: NCMC Financial Plan; DCHA 2004 Utilization Indicators.			

- As indicated previously, about half of NCMC's revenue is anticipated to be derived from inpatient services.

- The NCMC financial plan indicates that Admissions per Day is one of the primary statistical drivers for the projection period.

- In this comparison, Greater Southeast and Washington Hospital Center are clear outliers.

- NCMC's year five estimate is on par with the average of the other five comparison hospitals (excluding Greater Southeast and Washington Hospital Center).

Emergency Room Visits Per Day Comparison		
Hospital	Emergency Dept. Visits	Emergency Dept. Visits Per Day
NCMC Year 5	50,845	139
GWU	54,351	149
Georgetown	26,221	72
Greater Southeast	39,103	107
Howard	47,738	131
Providence	46,492	127
Sibley	27,503	75
Wash. Hospt. Center	66,732	183
Average (Excluding NCMC)	44,020	121
Average (Excluding NCMC and WHC)	40,235	110
Sources: NCMC Financial Plan; DCHA 2004 Utilization Indicators.		

- The NCMC financial plan indicates that Emergency Room Visits Per Day is one of the primary statistical drivers for the projection period.

- About 8 percent of NCMC's revenue is anticipated to be derived from emergency room services.

- In this comparison, given its size, Washington Hospital Center is once again an outlier. NCMC's year five figure is 26 percent higher than the average of the other six comparison hospitals (excluding Washington Hospital Center).

- On this measure, NCMC exceeds all but one of the remaining six comparison hospitals and in three cases – Georgetown (72 emergency room visits per day), Greater Southeast (107 emergency room visits per day), and Sibley (75 emergency room visits per day) – NCMC exceeds the comparison hospital by 30 percent or more.

Payor Mix Analysis

Comparison of Payor Mix - Inpatient Revenue		
	NCMC - Year 5	DC Average
Medicare	28.8%	36.6%
Medicaid	19.7%	21.4%
Sub-Total Public	48.5%	58.1%
Managed care	31.1%	29.2%
Commercial insurance	13.2%	8.6%
Sub-Total Private	44.3%	37.8%
Self-pay	7.2%	2.5%
Other		1.7%
Sources: NCMC Financial Plan; DCHA Financial Indicators Fiscal Year 2004.		

- NCMC's year five estimated inpatient payor mix assumes a lower percentage of public insurance (Medicare and Medicaid) and a higher percentage of private insurance than the DC average.

- If this payor mix skews more towards the DC average, then this could place downward pressure on NCMC's revenue base.

- NCMC's inpatient payor mix is much more favorable than the payor mix experienced by DC General Hospital.

Comparison of Payor Mix - Outpatient Payors		
	NCMC - Year 5	DC Average
Medicare	30.0%	24.1%
Medicaid	19.7%	15.3%
Sub-Total Public	49.7%	39.4%
Managed care	29.9%	42.2%
Commercial insurance	13.2%	11.1%
Sub-Total Private	43.1%	53.3%
Self-pay	7.2%	4.0%
Other		3.4%
Sources: NCMC Financial Plan; DCHA Financial Indicators Fiscal Year 2004.		

- NCMC's year five outpatient payor mix appears more reasonable compared to the DC hospital average, with NCMC assuming above average public insurance and below average private insurance.

Comparison of Payor Mix - Emergency Room Revenue		
	NCMC - Year 5	DC Average
Medicare	20.0%	25.6%
Medicaid	12.0%	20.8%
Sub-Total Public	32.0%	46.4%
Managed care	19.8%	28.8%
Commercial insurance	16.2%	9.1%
Sub-Total Private	36.0%	37.9%
Self-pay	20.0%	13.8%
Other		2.0%
Sources: NCMC Financial Plan; DCHA Financial Indicators Fiscal Year 2004.		

- The payor mix for emergency room revenue indicates that NCMC's share of payors with private insurance is similar to the DC average.

- The public share for NCMC is lower than the average, but this accounted for with an above average assumption of self-pay payors.

Payor Mix Comparison				
	Medicare	Medicaid\Health Alliance	Private Insurance	Self-pay
NCMC - Net revenue (Year 5)	32%	19%	37%	11%
Howard	28%	43%	21%	9%
Greater Southeast	35%	46%	13%	6%
Wash Hosp. Center	40%	14%	43%	3%
Providence	48%	27%	22%	3%
GWU	30%	15%	55%	0%
Georgetown	28%	8%	61%	4%
Sibley	45%	1%	49%	4%
Note: This table compares NCMC's net revenue payor mix to the gross payor mix of other area hospitals. Sources: NCMC Financial Plan; DCHA Financial Indicators Fiscal Year 2004.				

- Compared to individual hospitals, NCMC's year five total payor mix resembles Washington Hospital Center. After five years of operation, can NCMC achieve a payor mix similar to an established health care facility such as the Washington Hospital Center?

- NCMC's estimated share of revenue from private insurance is almost twice that of Howard University Hospital and Providence Hospital and almost three times that of Greater Southeast.

Expense Analysis

Salaries and Wages as a Percent of Net Patient Revenue					
NCMC	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Net Patient Revenue	141,799,000	177,538,000	203,960,000	220,471,000	225,198,000
Salaries and Wages	60,726,000	71,987,000	83,381,000	89,886,000	90,945,000
Salaries and Wages as % of Net Patient Revenue	43%	41%	41%	41%	**40%**
Howard University Hospital	**FY 2003**	**FY 2004**	**FY 2005**	**3-Year Average**	
Net Patient Revenue	216,967,012	224,019,307	222,579,328		
Salaries and Wages	104,974,897	100,714,154	112,825,513		
Salaries and Wages as % of Net Patient Revenue	48%	45%	51%	**48%**	
			2005		
Standard and Poor's median ratio for stand-alone hospitals			**51% to 56%.**		
Sources: NCMS's Financial Plan; Standard and Poor's, "U.S. Not-For-Profit Health Care Median Ratios: Improvement Continues Across The Rating Spectrum," July 20, 2005.					

- The most critical cost driver for NCMC is salaries and wages, which constitute almost half of the operating costs of NCMC.

- One key metric for evaluating salary and wage and expense is salaries and wages as a percent of net patient revenue.

- By year five of the financial plan, NCMC is projected to have a salaries and wages to net revenue ratio of 40 percent. This is significantly lower than Standard and Poor's median ratio for stand-alone hospitals of 50 to 56 percent.

- NCMC's year five ratio is also below the 3-year average of Howard University Hospital of 48 percent.

- Have these potential costs been understated?

Howard University Hospital Accreditation Status

Program	Accreditation Status	Effective Date
Pediatrics	Accreditation Withdrawn	6/30/2003
Transitional Year	Voluntary Withdrawal	6/30/2003
Anesthesiology	Voluntary Withdrawal	6/30/2004
Emergency medicine	Accreditation Withdrawn	6/30/2004
Vascular and interventional radiology	Voluntary Withdrawal	6/30/2004
Urology	Accreditation Withdrawn	6/30/2004
Radiology-diagnostic	Accreditation Withdrawn	6/30/2005
Source: ACGME list of withdrawn programs (http://www.acgme.org/adspublic/)		

- The Accreditation Council for Graduate Medical Education (ACGME) is the organization which evaluates and accredits medical residency programs in the United States.

- Since 2002, the number of medical teaching programs accredited through ACGME at Howard University Hospital has declined by seven.

- Emergency medicine is among the programs no longer accredited.

- The lack of accreditation of medical programs, especially emergency medicine, places additional cost pressure on the hospital because lower paid residents are no longer available to provide hospital coverage.

- Howard University Hospital's financial difficulty last year was, in part, the result of the hospital replacing lower paid residents in the emergency room with higher paid doctors.

Sources

American Hospital Association. “The Fragile State of Hospital Finances,” March 2005.

District of Columbia Hospital Association, 2004 Utilization Indicators

District of Columbia Hospital Association, Financial Indicators for Fiscal Year 2004

“Hospital Benchmarks,” ingenix 2004 using 2002 Medicare cost reports as cited in Stroudwater Associates, “National Capital Medical Center, Review of Howard University Proposal,” December 2004.

National Capital Medical Center Financial Plan (currently being revised)

Standard and Poor’s, “U.S. Not-For-Profit Health Care 2005 Median Ratios: Improvement Continues Across The Rating Spectrum,” July 20, 2005.

Accreditation Council for Graduate Medical Education (www.acgme.org/adspublic)